



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,781	08/24/2001	Rong C. Fang	069116.0184	9032
50627	7590	11/22/2005	EXAMINER	
BAKER BOTTS L.L.P.			MEW, KEVIN D	
2001 ROSS AVENUE			ART UNIT	
6TH FLOOR			PAPER NUMBER	
DALLAS, TX 75201			2664	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <span style="float: right;">✓</span> 09/935,781	Applicant(s) FANG, RONG C.	
	Examiner Kevin Mew	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-14 and 16-28 is/are allowed.
- 6) ☒ Claim(s) 1 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Final Action***

***Response to Amendment***

1. Applicant's Remarks/Arguments filed on 8/3/2005 have been fully considered. Claims 1-28 are currently pending.
2. Acknowledgement is made of the amended claims 5, 19 regarding the claims objections set forth in the previous Office Action. The corrections are acceptable and the claim objections have been withdrawn.

***Specification***

3. The amended abstract in applicant's Remarks/Arguments has not yet been received. The examiner earnestly requests applicant to resubmit a copy of the amended abstract with respect to the following objection cited in the previous Office Action.

Please make appropriate correction to "Embodiments of the present invention described" in line 1 of the abstract. Also, the abstract of the disclosure should not include the title of the instant application.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bux et al. (USP 4,726,018) in view of Lothberg et al. (US Publication 2005/0058136 A1).

Regarding claims 1, 15, Bux discloses an apparatus (see the communication system structure, Fig. 1) to perform a method for transporting data (for transmitting data on ring 11, see col. 3, lines 1-58 and Fig. 1), comprising:

transmitting, through Synchronized Packet-based Trunk (Ring Attachment RA which includes Ring Insert Switch Circuitry and Ring Access Control circuitry, see col. 3, lines 1-58), data to communication ring (transmission of data on the ring, see col. 3, lines 34-39), wherein the communication ring employs Dynamic Bandwidth Sharing; and

transporting, through the communication ring, the data (any active station receives all data signals passing on the ring, see element 11, Fig. 1 and applies its own data signals to the next section of the ring, see col. 3, lines 1-58).

Bus does not explicitly show the data is transmitted in different packet formats, the different packet formats separately transmitting signaling data, synchronous data, and asynchronous data.

However, Brueckheimer discloses a generic adaptation technology architecture through which data is transmitted in different packet formats (ATM, TDM, SONET packets, see Figs 1.

and 9), the different packet formats separately transmitting signaling data (DTMF access signaling data, see col. 7, lines 42-52, Figs 1 and 9), synchronous data (TDM, SONET data), and asynchronous data (ATM cells data, see Figs. 1 and 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system and method of transmitting asynchronous data and synchronous voice in Bus with the teaching of Brueckheimer in providing a generic adaptation technology architecture for transmitting data in different packet formats such as ATM, SONET and DTMF access signaling such that data is transmitted in different packet formats, wherein the different packet formats separately transmitting signaling data, synchronous data, and asynchronous data.

The motivation to do so is to provide a functional partitioning of devices and an architecture that is optimal for variable and fixed packet adaptation having the greatest possible degree of flexibility in isolation or in combination to serve trunking, interworking and switching of different traffic types.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 15 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments, see pages 12-14, filed on 8/3/2005, with respect to claims 2-14, 20-28 have been fully considered and are persuasive. The rejections to claims 2-14, 20-28 set forth in the previous Office Action have been withdrawn.

*Allowable Subject Matter*

7. Claims 2-5, 6-14, 16-19, 20-28 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

In claims 2, 16, a method for transporting data, comprising:

the bandwidth of the communication ring is divided into Subscription Bandwidth for each node on the communication ring and Over-Subscription bandwidth shared by all nodes on the communication ring.

In claims 3, 17, a synchronized Packet-Based Trunk method for transporting data, comprising:

transmitting a portion of the set of asynchronous data through the communication channel during the Frame Cycle, wherein the portion is selected responsive to the size of the Frame Synchronization Packet, the size of the transmitted set of synchronous data, and the duration of the Frame Cycle.

In claims 6, 20, a dynamic bandwidth sharing assigning method, comprising:

a Over-Subscription Bandwidth for each of a plurality of nodes on the communication ring, the Over-Subscription Bandwidth being an amount of bandwidth on the communication ring not being assigned as Subscription Bandwidth, the Over-Subscription Bandwidth being shared by all the nodes on the communication ring,

the Access Bandwidth being the actual Maximum Over-Subscription Bandwidth at a particular time.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure with respect to apparatus and method for facilitating data packet transportation.

US Publication 2005/0058136 to Lothberg et al.

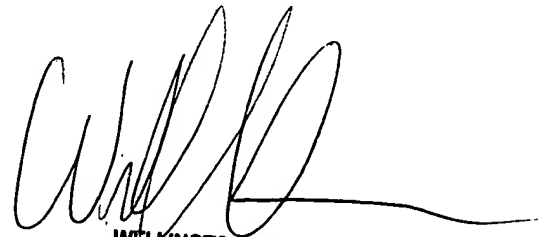
US Publication 2005/0201387 to Willis

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 571-272-3141. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDM  
Art Unit 2664

  
WELLINGTON CHIN  
SUPERVISORY PATENT EXAMINER